

**kHz**  
**15 600 – 19 800**

Allocation to Services		
Region 1	Region 2	Region 3
<b>15 600 – 15 800</b>	BROADCASTING S5.134 S5.135 S5.146	
<b>15 800 – 16 360</b>	FIXED S5.153	
<b>16 360 – 17 410</b>	MARITIME MOBILE S5.109 S5.110 S5.132 S5.145	
<b>17 410 – 17 480</b>	FIXED	
<b>17 480 – 17 550</b>	BROADCASTING S5.134 S5.135 S5.146	
<b>17 550 – 17 900</b>	BROADCASTING S5.148	
<b>17 900 – 17 970</b>	AERONAUTICAL MOBILE (R)	
<b>17 970 – 18 030</b>	AERONAUTICAL MOBILE (OR)	
<b>18 030 – 18 052</b>	FIXED	
<b>18 052 – 18 068</b>	FIXED Space Research	
<b>18 068 – 18 168</b>	AMATEUR S5.120 AMATEUR-SATELLITE S5.154	
<b>18 168 – 18 780</b>	FIXED Mobile except aeronautical mobile	
<b>18 780 – 18 900</b>	MARITIME MOBILE	
<b>18 900 – 19 020</b>	BROADCASTING S5.134 S5.135 S5.146	
<b>19 020 – 19 680</b>	FIXED	
<b>19 680 – 19 800</b>	MARITIME MOBILE S5.132	

**NOC S5.153**

In Region 3, the stations of those services to which the band 15 995 - 16 005 kHz is allocated may transmit standard frequency and time signals.

**MOD S5.154**

*Additional allocation:* in Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Moldova, Uzbekistan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan and Ukraine, the band 18 068 - 18 168 kHz is also allocated to the fixed service on a primary basis for use within their boundaries, with a peak envelope power not exceeding 1 kW.

**kHz**  
**19 800 – 23 350**

Allocation to Services		
Region 1	Region 2	Region 3
<b>19 800 – 19 990</b>	FIXED	
<b>19 990 – 19 995</b>	STANDARD FREQUENCY AND TIME SIGNAL Space Research S5.111	
<b>19 995 – 20 010</b>	STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz) S5.111	
<b>20 010 – 21 000</b>	FIXED Mobile	
<b>21 000 – 21 450</b>	AMATEUR S5.120 AMATEUR-SATELLITE	
<b>21 450 – 21 850</b>	BROADCASTING S5.148	
<b>MOD</b> <b>21 850 – 21 870</b>	FIXED S5.155A S5.155	
<b>MOD</b> <b>21 870 – 21 924</b>	FIXED S5.155B	
<b>21 924 – 22 000</b>	AERONAUTICAL MOBILE (R)	
<b>22 000 – 22 855</b>	MARITIME MOBILE S5.132 S5.156	
<b>22 855 – 23 000</b>	FIXED S5.156	
<b>23 000 – 23 200</b>	FIXED Mobile except aeronautical mobile (R) S5.156	
<b>MOD</b> <b>23 200 – 23 350</b>	AERONAUTICAL MOBILE (OR) FIXED S5.156A	

- MOD S5.155** *Additional allocation:* in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakhstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russia, Tajikistan, Turkmenistan and Ukraine, the band 21 850 - 21 870 kHz is also allocated to the aeronautical mobile (R) services on a primary basis.
- ADD S5.155A** In Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakhstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russia, Tajikistan, Turkmenistan and Ukraine, the use of the band 21 850 - 21 870 kHz by the fixed service is limited to provision of services related to aircraft flight safety.
- ADD S5.155B** The band 21 870 - 21 924 kHz is used by the fixed service for provision of services related to aircraft flight safety.
- NOC S5.156** *Additional allocation:* in Nigeria, the band 22 720 - 23 200 kHz is also allocated to the meteorological aids service (radiosondes) on a primary basis.
- ADD S5.156A** The use of the band 23 200 - 23 350 kHz by the fixed service is limited to provision of services related to aircraft flight safety.

**kHz**  
**23 350 – 27 500**

**MOD**

**MOD**

**MOD**

Allocation to Services		
Region 1	Region 2	Region 3
23 350 – 24 000	FIXED MOBILE except aeronautical mobile S5.157	
24 000 – 24 890	FIXED LAND MOBILE	
24 890 – 24 990	AMATEUR S5.120 AMATEUR-SATELLITE	
24 990 – 25 005	STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)	
25 005 – 25 010	STANDARD FREQUENCY AND TIME SIGNAL Space Research	
25 010 – 25 070	FIXED MOBILE except aeronautical mobile	
25 070 – 25 210	MARITIME MOBILE	
25 210 – 25 550	FIXED MOBILE except aeronautical mobile	
25 550 – 25 670	RADIO ASTRONOMY S5.149	
25 670 – 26 100	BROADCASTING	
26 100 – 26 175	MARITIME MOBILE S5.132	
26 175 – 27 500	FIXED MOBILE except aeronautical mobile S5.150	

NOC S5.157

The use of the band 23 350 - 24 000 kHz by the maritime mobile service is limited to inter-ship radiotelegraphy.

SUP S5.158

SUP S5.159

**MHz**  
**27.5 – 40.98**

Allocation to Services		
Region 1	Region 2	Region 3
<b>27.5 – 28</b>	METEOROLOGICAL AIDS FIXED MOBILE	
<b>28 – 29.7</b>	AMATEUR AMATEUR-SATELLITE	
<b>29.7 – 30.005</b>	FIXED MOBILE	
<b>30.005 – 30.01</b>	SPACE OPERATION (satellite identification) FIXED MOBILE SPACE RESEARCH	
<b>30.01 – 37.5</b>	FIXED MOBILE	
<b>37.5 – 38.25</b>	FIXED MOBILE Radio Astronomy S5.149	
<b>38.25 – 39.986</b>	FIXED MOBILE	
<b>39.986 – 40.02</b>	FIXED MOBILE Space Research	
<b>40.02 – 40.98</b>	FIXED MOBILE S5.150	

**MHz**  
**40.98 – 68**

Allocation to Services		
Region 1	Region 2	Region 3
<b>40.98 – 41.015</b>	<b>FIXED</b> <b>MOBILE</b> <b>Space Research</b> <b>S5.160 S5.161</b>	
<b>41.015 – 44</b>	<b>FIXED</b> <b>MOBILE</b> <b>S5.160 S5.161</b>	
<b>44 – 47</b>	<b>FIXED</b> <b>MOBILE</b> <b>S5.162</b>	
<b>47 – 68</b> <b>BROADCASTING</b>	<b>47 – 50</b> <b>FIXED</b> <b>MOBILE</b>	<b>47 – 50</b> <b>FIXED</b> <b>MOBILE</b> <b>BROADCASTING</b>
	<b>50 – 54</b> <b>AMATEUR</b> <b>S5.166 S5.167 S5.168 S5.170</b>	
	<b>54 – 68</b> <b>BROADCASTING</b> <b>Fixed</b> <b>Mobile</b> <b>S5.163 S5.164 S5.165</b> <b>S5.169 S5.171</b>	<b>54 – 68</b> <b>FIXED</b> <b>MOBILE</b> <b>BROADCASTING</b>

- MOD S5.160** *Additional allocation:* in Botswana, Burundi, Lesotho, Malawi, Namibia, Rwanda, South Africa, Swaziland and Zaire, the band 41 - 44 MHz is also allocated to the aeronautical radionavigation service on a primary basis.
- NOC S5.161** *Additional allocation:* in the Islamic Republic of Iran and Japan, the band 41 - 44 MHz is also allocated to the radiolocation service on a secondary basis.
- NOC S5.162** *Additional allocation:* in Australia and New Zealand, the band 44 - 47 MHz is also allocated to the broadcasting service on a primary basis.
- MOD S5.163** *Additional allocation:* in Armenia, Azerbaijan, Belarus, Estonia, Georgia, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russia, Tajikistan, Turkmenistan and Ukraine, the bands 47 - 48.5 MHz and 56.5 - 58 MHz are also allocated to the fixed and land mobile services on a secondary basis.
- MOD S5.164** *Additional allocation:* in Albania, Germany, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Côte d'Ivoire, Denmark, Spain, Finland, France, Gabon, Greece, Ireland, Israel, Italy, Jordan, Lebanon, Libya, Liechtenstein, Luxembourg, Madagascar, Mali, Malta, Morocco, Mauritania, Monaco, Nigeria, Norway, the Netherlands, Poland, the United Kingdom, Senegal, Slovenia, Sweden, Switzerland, Swaziland, Syria, Togo, Tunisia, Turkey and Yugoslavia, the band 47 - 68 MHz and in Romania, the band 47 - 58 MHz, are also allocated to the land mobile service on a primary basis. However, stations of the land mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations of countries other than those mentioned in connection with the band.
- MOD S5.165** *Additional allocation:* in Angola, Cameroon, the Congo, Madagascar, Mozambique, Somalia, Sudan, Tanzania and Chad, the band 47 - 68 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
- NOC S5.166** *Alternative allocation:* in New Zealand, the band 50 - 51 MHz is allocated to the fixed, mobile and broadcasting services on a primary basis; the band 53 - 54 MHz is allocated to the fixed and mobile services on a primary basis.
- MOD S5.167** *Alternative allocation:* in Bangladesh, Brunei Darussalam, India, Indonesia, the Islamic Republic of Iran, Malaysia, Pakistan, Singapore and Thailand, the band 50 - 54 MHz is allocated to the fixed, mobile and broadcasting services on a primary basis.



- NOC S5.168**      *Additional allocation:* in Australia, China and the Democratic People's Republic of Korea, the band 50 - 54 MHz is also allocated to the broadcasting service on a primary basis.
- NOC S5.169**      *Alternative allocation:* in Botswana, Burundi, Lesotho, Malawi, Namibia, Rwanda, South Africa, Swaziland, Zaire, Zambia and Zimbabwe, the band 50 - 54 MHz is allocated to the amateur service on a primary basis.
- NOC S5.170**      *Additional allocation:* in New Zealand, the band 51 - 53 MHz is also allocated to the fixed and mobile services on a primary basis.
- MOD S5.171**      *Additional allocation:* in Botswana, Burundi, Lesotho, Malawi, Mali, Namibia, Rwanda, South Africa, Swaziland, Zaire and Zimbabwe, the band 54 - 68 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
- NOC S5.172**      *Different category of service:* in the French Overseas Departments in Region 2, Guyana, Jamaica and Mexico, the allocation of the band 54 - 68 MHz to the fixed and mobile services is on a primary basis (see No. S5.33).

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- MOD S5.173**      *Different category of service:* in the French Overseas Departments in Region 2, Guyana, Jamaica and Mexico, the allocation of the band 68 - 72 MHz to the fixed and mobile services is on a primary basis (see No. S5.33).
- MOD S5.174**      *Alternative allocation:* in Bulgaria, Hungary, Poland, Romania and Slovakia, the band 68 - 73 MHz is allocated to the broadcasting service on a primary basis and used in accordance with the decisions in the Final Acts of the Special Regional Conference (Geneva, 1960).
- MOD S5.175**      *Alternative allocation:* in Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Latvia, Lithuania, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan and Ukraine, the bands 68 - 73 MHz and 76 - 87.5 MHz are allocated to the broadcasting service on a primary basis. The services to which these bands are allocated in other countries and the broadcasting service in the countries listed above are subject to agreements with the neighbouring countries concerned.
- NOC S5.176**      *Additional allocation:* in Australia, China, the Republic of Korea, the Philippines, the Democratic People's Republic of Korea and Western Samoa, the band 68 - 74 MHz is also allocated to the broadcasting service on a primary basis.
- MOD S5.177**      *Additional allocation:* in Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Russia, Tajikistan, Turkmenistan and Ukraine, the band 73 - 74 MHz is also allocated to the broadcasting service on a primary basis, subject to agreement obtained under No. S9.21.
- MOD S5.178**      *Additional allocation:* in Colombia, Costa Rica, Cuba, El Salvador, Guatemala, Guyana, Honduras and Nicaragua, the band 73 - 74.6 MHz is also allocated to the fixed and mobile services on a secondary basis.
- MOD S5.179**      *Additional allocation:* in Armenia, Azerbaijan, Belarus, Bulgaria, China, Georgia, Kazakhstan, Latvia, Lithuania, Moldova, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Russia, Tajikistan, Turkmenistan and Ukraine, the bands 74.6 - 74.8 MHz and 75.2 - 75.4 MHz are also allocated to the aeronautical radionavigation service, on a primary basis, for ground-based transmitters only.

**NOC S5.180**

The frequency 75 MHz is assigned to marker beacons. Administrations shall refrain from assigning frequencies close to the limits of the guardband to stations of other services which, because of their power or geographical position, might cause harmful interference or otherwise place a constraint on marker beacons.

Every effort should be made to improve further the characteristics of airborne receivers and to limit the power of transmitting stations close to the limits 74.8 MHz and 75.2 MHz.

**MOD S5.181**

*Additional allocation:* in Germany, Austria, Belgium, Cyprus, Denmark, Egypt, Spain, France, Greece, Israel, Italy, Japan, Jordan, Lebanon, Malta, Morocco, Monaco, Norway, the United Kingdom, Sweden, Switzerland and Syria, the band 74.8 - 75.2 MHz is also allocated to the mobile service on a secondary basis, subject to agreement obtained under No. S9.21. In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of the procedure invoked under No. S9.21.

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- NOC S5.182** *Additional allocation:* in Western Samoa, the band 75.4 - 87 MHz is also allocated to the broadcasting service on a primary basis.
- NOC S5.183** *Additional allocation:* in China, the Republic of Korea, Japan, the Philippines and the Democratic People's Republic of Korea, the band 76 - 87 MHz is also allocated to the broadcasting service on a primary basis.
- MOD S5.184** *Additional allocation:* in Bulgaria, Hungary and Romania, the band 76 - 87.5 MHz is also allocated to the broadcasting service on a primary basis and used in accordance with the decisions contained in the Final Acts of the Special Regional Conference (Geneva, 1960).
- NOC S5.185** *Different category of service:* in the United States, the French Overseas Departments in Region 2, Guyana, Jamaica, Mexico and Paraguay, the allocation of the band 76 - 88 MHz to the fixed and mobile services is on a primary basis (see No. S5.33).
- MOD S5.186** *Additional allocation:* in Region 3 (except in the Republic of Korea, India, Japan, Malaysia, the Philippines and Singapore), the band 79.75 - 80.25 MHz is also allocated to the radio astronomy service on a primary basis.
- NOC S5.187** *Alternative allocation:* in Albania, the band 81 - 87.5 MHz is allocated to the broadcasting service on a primary basis and used in accordance with the decisions contained in the Final Acts of the Special Regional Conference (Geneva, 1960).
- MOD S5.188** *Additional allocation:* in Australia, the band 85 - 87 MHz is also allocated to the broadcasting service on a primary basis. The introduction of the broadcasting service in Australia is subject to special agreements between the administrations concerned.
- SUP S5.189**
- MOD S5.190** *Additional allocation:* in France, Ireland, Israel, Italy and Monaco, the band 87.5 - 88 MHz is also allocated to the land mobile service on a primary basis, subject to agreement obtained under No. S9.21.
- SUP S5.191**
- NOC S5.192** *Additional allocation:* in China, the Republic of Korea, the Philippines and Singapore, the band 100 - 108 MHz is also allocated to the fixed and mobile services on a primary basis.
- SUP S5.193**

- MOD S5.194** *Additional allocation:* in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakhstan, Lebanon, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Russia, Somalia, Syria, Tajikistan, Turkmenistan, Turkey and Ukraine, the band 104 - 108 MHz is also allocated to the mobile, except aeronautical mobile (R), service on a secondary basis.
- SUP S5.195**
- SUP S5.196**
- MOD S5.197** *Additional allocation:* in Germany, Austria, Cyprus, Denmark, Egypt, Spain, France, Israel, Italy, Japan, Jordan, Lebanon, Malta, Morocco, Monaco, Norway, Pakistan, the United Kingdom, Sweden and Syria, the band 108 - 111.975 MHz is also allocated to the mobile service on a secondary basis, subject to agreement obtained under No. S9.21. In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of the procedures invoked under No. S9.21.
- MOD S5.198** *Additional allocation:* the band 117.975 - 137 MHz is also allocated to the aeronautical mobile-satellite (R) service on a secondary basis, subject to agreement obtained under No. S9.21.
- NOC S5.199** The bands 121.45 - 121.55 MHz and 242.95 - 243.05 MHz are also allocated to the mobile-satellite service for the reception on board satellites of emissions from emergency position-indicating radiobeacons transmitting at 121.5 MHz and 243 MHz (see Appendix S13).
- NOC S5.200** In the band 117.975 - 136 MHz, the frequency 121.5 MHz is the aeronautical emergency frequency and, where required, the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz. Mobile stations of the maritime mobile service may communicate on these frequencies under the conditions laid down in Article S31 and Appendix S13 for distress and safety purposes with stations of the aeronautical mobile service.

**MOD S5.201**                    *Additional allocation:* in Angola, Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Hungary, the Islamic Republic of Iran, Iraq, Japan, Kazakhstan, Latvia, Lithuania, Moldova, Mongolia, Mozambique, Uzbekistan, Papua New Guinea, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russia, Tajikistan, Turkmenistan and Ukraine, the band 132 - 136 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service.

**MOD S5.202**                    *Different category of service:* in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakhstan, Latvia, Lithuania, Moldova, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russia, Tajikistan, Turkmenistan, Turkey and Ukraine, the allocation of the band 136 - 137 MHz to the aeronautical mobile (OR) service is on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service.

**MOD S5.203**                    *Additional allocation:* the band 136 - 137 MHz is also allocated to the space operation service (space-to-Earth), meteorological-satellite service (space-to-Earth) and the space research service (space-to-Earth) on a secondary basis (see Resolution 408 (Mob-87)).



**MHz**  
**137 – 138**

Allocation to Services		
Region 1	Region 2	Region 3
<b>137 – 137.025</b>	SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) S5.209 S5.208A SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208	
<b>137.025 – 137.175</b>	SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-Satellite (space-to-Earth) S5.209 S5.208A Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208	
<b>137.175 – 137.825</b>	SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) S5.209 S5.208A SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208	
<b>137.825 – 138</b>	SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-Satellite (space-to-Earth) S5.209 S5.208A Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208	

- NOC S5.204** *Different category of service:* in Afghanistan, Saudi Arabia, Bahrain, Bangladesh, Bosnia and Herzegovina, Brunei Darussalam, China, Cuba, the United Arab Emirates, India, Indonesia, the Islamic Republic of Iran, Iraq, Malaysia, Oman, Pakistan, Philippines, Qatar, Singapore, Sri Lanka, Thailand, Yemen and Yugoslavia, the band 137 - 138 MHz is allocated to the fixed and mobile, except aeronautical mobile (R), services is on a primary basis (see No. S5.33).
- NOC S5.205** *Different category of service:* in Israel and Jordan, the allocation of the band 137 - 138 MHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. S5.33).
- MOD S5.206** *Different category of service:* in Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Egypt, Finland, France, Georgia, Greece, Hungary, Kazakhstan, Lebanon, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russia, Syria, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 137 - 138 MHz to the aeronautical mobile (OR) service is on a primary basis (see No. S5.33).
- NOC S5.207** *Additional allocation:* in Australia, the band 137 - 144 MHz is also allocated to the broadcasting service on a primary basis until that service can be accommodated within regional broadcasting allocations.
- MOD S5.208** The use of the band 137 - 138 MHz by the mobile-satellite service is subject to coordination under No. S9.11bis and to Resolution 46 (Rev.WRC-95). The power flux-density limit indicated in [Table X] of Article [S21] shall apply until such time as a competent world radiocommunication conference revises it. Additionally, until that time, the provisions of Resolution COM5-5 apply.
- ADD S5.208A** In making assignments to space stations in the mobile-satellite service in the bands 137 - 138 MHz, 387 - 390 MHz and 400.15 - 401 MHz, administrations shall take all practicable steps to protect the radio astronomy service in the bands 150.05 - 153 MHz, 322 - 328.6 MHz, 406.1 - 410 MHz and 608 - 614 MHz from harmful interference from unwanted emissions. For information, the threshold levels of interference detrimental to the radio astronomy service to be protected are shown in Table 1 of Recommendation ITU-R RA.769-1.
- MOD S5.209** The use of the bands 137 - 138 MHz, 148 - 149.9 MHz, 400.15 - 401 MHz, 455 - 456 MHz and 459 - 460 MHz by the mobile-satellite service and the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz by the land mobile-satellite service is limited to non-geostationary satellite systems.

**MHz**  
**138 – 148**

Allocation to Services		
Region 1	Region 2	Region 3
<b>138 – 143.6</b> AERONAUTICAL MOBILE (OR)  S5.210 S5.211 S5.212 S5.214	<b>138 – 143.6</b> FIXED MOBILE RADIOLOCATION Space Research (space-to-Earth)	<b>138 – 143.6</b> FIXED MOBILE Space Research (space-to-Earth)  S5.207 S5.213
<b>143.6 – 143.65</b> AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth)  S5.211 S5.212 S5.214	<b>143.6 – 143.65</b> FIXED MOBILE SPACE RESEARCH (space-to-Earth) RADIOLOCATION	<b>143.6 – 143.65</b> FIXED MOBILE SPACE RESEARCH (space-to-Earth)  S5.207 S5.213
<b>143.65 – 144</b> AERONAUTICAL MOBILE (OR)  S5.210 S5.211 S5.212 S5.214	<b>143.65 – 144</b> FIXED MOBILE RADIOLOCATION Space Research (space-to-Earth)	<b>143.65 – 144</b> FIXED MOBILE Space Research (space-to-Earth)  S5.207 S5.213
<b>144 – 146</b> AMATEUR S5.120 AMATEUR-SATELLITE S5.216		
<b>146 – 148</b> FIXED MOBILE except aeronautical mobile (R)	<b>146 – 148</b> AMATEUR  S5.217	<b>146 – 148</b> AMATEUR FIXED MOBILE  S5.217

MOD

- MOD S5.210** *Additional allocation:* in Austria, Belgium, France, Italy, Liechtenstein, Luxembourg, Slovakia, the Czech Republic, the United Kingdom and Switzerland, the bands 138 - 143.6 MHz and 143.65 - 144 MHz are also allocated to the space research service (space-to-Earth) on a secondary basis.
- NOC S5.211** *Additional allocation:* in Germany, Saudi Arabia, Austria, Bahrain, Belgium, Bosnia and Herzegovina, Denmark, the United Arab Emirates, Spain, Finland, Greece, Ireland, Israel, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Liechtenstein, Luxembourg, Mali, Malta, Norway, the Netherlands, Qatar, the United Kingdom, Slovenia, Somalia, Sweden, Switzerland, Tanzania, Tunisia, Turkey and Yugoslavia, the band 138 - 144 MHz is also allocated to the maritime mobile and land mobile services on a primary basis.
- NOC S5.212** *Alternative allocation:* in Angola, Botswana, Burundi, Cameroon, the Central African Republic, the Congo, Gabon, Gambia, Ghana, Guinea, Iraq, Jordan, Lesotho, Liberia, Libya, Malawi, Mozambique, Namibia, Nigeria, Oman, Rwanda, Sierra Leone, South Africa, Swaziland, Chad, Togo, Zaire, Zambia and Zimbabwe, the band 138 - 144 MHz is allocated to the fixed and mobile services on a primary basis.
- NOC S5.213** *Additional allocation:* in China, the band 138 - 144 MHz is also allocated to the radiolocation service on a primary basis.
- MOD S5.214** *Additional allocation:* in Bosnia and Herzegovina, Croatia, Eritrea, Ethiopia, Kenya, The Former Yugoslav Republic of Macedonia, Malta, Slovenia, Somalia, Sudan, Tanzania and Yugoslavia, the band 138 - 144 MHz is also allocated to the fixed service on a primary basis.
- SUP S5.215**
- NOC S5.216** *Additional allocation:* in China, the band 144 - 146 MHz is also allocated to the aeronautical mobile (OR) service on a secondary basis.
- NOC S5.217** *Alternative allocation:* in Afghanistan, Bangladesh, Cuba, Guyana and India, the band 146 - 148 MHz is allocated to the fixed and mobile services on a primary basis.

**MHz**  
**148 – 156.8375**

**MOD**

Allocation to Services		
Region 1	Region 2	Region 3
<b>148 – 149.9</b> FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) S5.209 S5.218 S5.219 S5.221	<b>148 – 149.9</b> FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) S5.209 S5.218 S5.219 S5.221	
<b>149.9 – 150.05</b>	RADIONAVIGATION-SATELLITE S5.220 S5.222 S5.223 LAND MOBILE-SATELLITE (Earth-to-space) S5.209 S5.224	
<b>150.05 – 153</b> FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149	<b>150.05 – 156.7625</b> FIXED MOBILE S5.225 S5.226 S5.227	
<b>153 – 154</b> FIXED MOBILE except aeronautical mobile (R) Meteorological Aids		
<b>154 – 156.7625</b> FIXED MOBILE except aeronautical mobile (R) S5.226 S5.227		
<b>156.7625 – 156.8375</b>	MARITIME MOBILE (distress and calling) S5.111 S5.226	

- MOD S5.218** *Additional allocation:* the band 148 - 149.9 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. S9.21. The bandwidth of any individual transmission shall not exceed  $\pm 25$  kHz.
- MOD S5.219** The use of the band 148 - 149.9 MHz by the mobile-satellite service is subject to coordination under No. S9.11bis. The mobile-satellite service shall not constrain the development and use of the fixed, mobile and space operation services in the band 148 - 149.9 MHz.
- MOD S5.220** The use of the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz by the land mobile-satellite service is subject to coordination under S9.11bis. The land mobile-satellite service shall not constrain the development and use of the radionavigation-satellite service in the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz.
- MOD S5.221** Stations of the mobile-satellite service in the band 148 - 149.9 MHz shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services operating in accordance with the Table of Frequency Allocations in the following countries: Albania, Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Benin, Bosnia and Herzegovina, Brunei Darussalam, Bulgaria, Burkina Faso, Cameroon, Canada, China, Cyprus, Colombia, Congo, the Republic of Korea, Croatia, Cuba, Denmark, Egypt, the United Arab Emirates, Ecuador, Eritrea, Spain, Estonia, Ethiopia, Finland, France, Gabon, Ghana, Greece, Guinea, Guinea Bissau, Honduras, Hungary, India, Indonesia, the Islamic Republic of Iran, Ireland, Iceland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Latvia, The Former Yugoslav Republic of Macedonia, Lebanon, Libya, Liechtenstein, Luxembourg, Malaysia, Mali, Malta, Mauritania, Moldova, Mongolia, Mozambique, Namibia, Norway, New Zealand, Oman, Uganda, Uzbekistan, Pakistan, Panama, Papua New Guinea, Paraguay, the Netherlands, Philippines, Poland, Portugal, Qatar, Syria, Kyrgyzstan, Slovakia, Romania, the United Kingdom, Russia, Senegal, Sierra Leone, Singapore, Slovenia, Sri Lanka, South Africa, Sweden, Switzerland, Suriname, Swaziland, Tanzania, Chad, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Viet Nam, Yemen, Yugoslavia, Zambia, and Zimbabwe.
- NOC S5.222** Emissions of the radionavigation-satellite service in the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz may also be used by receiving earth stations of the space research service.

- NOC S5.223** Recognizing that the use of the band 149.9 - 150.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation-satellite service, administrations are urged not to authorize such use in application of No. S4.4.
- MOD S5.224** In the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz, the allocation to the land mobile-satellite service shall be on a secondary basis until 1 January 1997.
- NOC S5.225** *Additional allocation:* in Australia and India, the band 150.05 - 153 MHz is also allocated to the radio astronomy service on a primary basis.
- NOC S5.226** The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. The conditions for the use of this frequency are contained in Article S31 and Appendix S13.
- In the bands 156 - 156.7625 MHz, 156.8375 - 157.45 MHz, 160.6 - 160.975 MHz and 161.475 - 162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see Articles S31 and S52 and Appendix S13).
- Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiocommunication service.
- However, the frequency 156.8 MHz and the frequency bands in which priority is given to the maritime mobile service may be used for radio-communications on inland waterways subject to agreement between interested and affected administrations and taking into account current frequency usage and existing agreements.
- NOC S5.227** In the maritime mobile VHF service the frequency 156.525 MHz is to be used exclusively for digital selective calling for distress, safety and calling (see Resolution 323 (Mob-87)). The conditions for the use of this frequency are prescribed in Articles S31 and S52 and in Appendices S13 and S18.
- SUP S5.228**

- NOC S5.229** *Alternative allocation:* in Morocco, the band 162 - 174 MHz is allocated to the broadcasting service on a primary basis. The use of this band shall be subject to agreement with administrations having services, operating or planned, in accordance with the Table which are likely to be affected. Stations in existence on 1 January 1981, with their technical characteristics as of that date, are not affected by such agreement.
- MOD S5.230** *Additional allocation:* in China, the band 163 - 167 MHz is also allocated to the space operation service (space-to-Earth) on a primary basis, subject to agreement obtained under No. S9.21.
- NOC S5.231** *Additional allocation:* in Afghanistan, China and Pakistan, the band 167 - 174 MHz is also allocated to the broadcasting service on a primary basis. The introduction of the broadcasting service into this band shall be subject to agreement with the neighbouring countries in Region 3 whose services are likely to be affected.
- NOC S5.232** *Additional allocation:* in Japan, the band 170 - 174 MHz is also allocated to the broadcasting service on a primary basis.
- MOD S5.233** *Additional allocation:* in China, the band 174 - 184 MHz is also allocated to the space research (space-to-Earth) and the space operation (space-to-Earth) services on a primary basis, subject to agreement obtained under No. S9.21. These services shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations.
- NOC S5.234** *Different category of service:* in Mexico, the allocation of the band 174 - 216 MHz to the fixed and mobile services is on a primary basis (see No. S5.33).
- (MOD) S5.235** *Additional allocation:* in Germany, Austria, Belgium, Denmark, Spain, Finland, France, Israel, Italy, Liechtenstein, Malta, Monaco, Norway, the Netherlands, the United Kingdom, Sweden and Switzerland, the band 174 - 223 MHz is also allocated to the land mobile service on a primary basis. However, the stations of the land mobile service shall not cause harmful interference to, or claim protection from, broadcasting stations, existing or planned, in countries other than those listed in this footnote.



**MOD**